WHAT IS CLAIMED IS:

1. A data broadcast material transmission method (1) for ground wave digital broadcasting, which enables simultaneous transmission of images, audio, and data materials as broadcast
5   materials to multiple locations via a cable communications network provided by a communication provider, the method comprising:

on a transmission side corresponding to an entrance portion to the cable communications network, eliminating, from an MPEG
10   stream containing data broadcast materials, carousel redundant information set due to repeated transmissions; and

on a receiving side corresponding to an exit portion from the cable communications network, restoring the carousel redundant information to the MPEG stream.

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2. The data broadcast material transmission method according to claim 1, further comprising:

setting a carousel redundant information elimination status into a user's free usage area in the MPEG stream, and
20   transmitting the carousel redundant information elimination status from the transmission side to the receiving side.

3. The digital broadcast material transmission method according to claim 2, wherein the carousel redundant information
25   elimination status includes restoration timing and a restoration quantity.

4. The data broadcast material transmission method according to claim 2, wherein the user's free usage area in the MPEG stream is a private section.

5. The data broadcast material transmission method according to claim 2, further comprising:

eliminating, as the carousel redundant information targeted for elimination, portions which are in 2nd and subsequent cycles and have same version numbers as a DSM-CC section containing DII (DownloadInfoIndication) and a DSM-CC section containing DDB (DownloadDataBlock), and replacing the carousel redundant information with private sections containing carousel skip descriptors having less information volume and indicating the carousel redundant information elimination status.

6. The data broadcast material transmission method according to claim 1, further comprising:

utilizing a time stamp in which a self-running counter counts upward based on a clock signal extracted from the MPEG stream on the input side, and constantly maintaining a program clock reference position of the post-processing MPEG stream on the output side at a predetermined interval of a fixed delay with respect to the MPEG stream on the input side.

7. A data broadcast material transmitter for ground wave digital broadcasting, which enables simultaneous transmission of images, audio, and data materials as broadcast materials to

multiple locations via a cable communications network provided by a communication provider, the transmitter comprising:

on a transmission side corresponding to an entrance portion to the cable communications network, a unit eliminating,

5 from an MPEG stream containing data broadcast materials, carousel redundant information set due to repeated transmissions; and

on a receiving side corresponding to an exit portion from the cable communications network, a unit restoring the carousel redundant information to the MPEG stream.

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8. The data broadcast material transmitter according to claim 7, further comprising:

a unit setting a carousel redundant information elimination status into a user's free usage area in the MPEG

15 stream, and transmitting the carousel redundant information elimination status from the transmission side to the receiving side.

9. The digital broadcast material transmitter according

20 to claim 8, wherein the carousel redundant information elimination status includes restoration timing and a restoration quantity.

10. The data broadcast material transmitter according to

25 claim 8, wherein the user's free usage area in the MPEG stream is a private section.

11. The data broadcast material transmitter according to claim 8, further comprising:

a unit eliminating, as the carousel redundant information targeted for elimination, portions which are in 2nd and subsequent cycles and have same version numbers as a DSM-CC section containing DII (DownloadInfoIndication) and a DSM-CC section containing DDB (DownloadDataBlock), and replacing the carousel redundant information with private sections containing carousel skip descriptors having less information volume and indicating the carousel redundant information elimination status.

12. The data broadcast material transmitter according to claim 7, further comprising:

a unit utilizing a time stamp in which a self-running counter counts upward based on a clock signal extracted from the MPEG stream on the input side, and constantly maintaining a program clock reference position of the post-processing MPEG stream on the output side at a predetermined interval of a fixed delay with respect to the MPEG stream on the input side.